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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/018,333 | 02/15/2002 | Min-Kyum Min Kim | 80800-000104 | 7901 |
| 30593 | 7590 | 10/06/2004 | EXAMINER | |
| HARNESS, DICKEY & PIERCE, P.L.C. | | | HAROLD, JEFFEREY F | |
| P.O. BOX 8910 | | | ART UNIT | |
| RESTON, VA 20195 | | | PAPER NUMBER | |
| | | | 2644 | |

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,333

Applicant(s)

KIM, MIN-KYUM MIN

Examiner

Jefferey F Harold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 and 32 is/are allowed.
- 6) ☒ Claim(s) 1-5, 14, 15, 18-20 and 33 is/are rejected.
- 7) ☒ Claim(s) 6-13, 16, 17 and 21-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. ***Claims 1-5, 14, 15, 18-20 and 33*** are rejected under 35 U.S.C. 102(b) as being anticipated by Burrell, IV (United States Patent 6,043,761), hereinafter referenced as Burrell.

Regarding **claim 1**, Burrell discloses a method of using a nine key alphanumeric binary keyboard. In addition Burrell discloses a method of inputting alphabet characters on a keypad, comprising the steps of: (a) forming a lattice on the surface of each button on the keypad such that the lattice elements correspond to the buttons on the keypad, and defining a lattice element on each button, which corresponds to the position of the button on the keypad, as a base lattice element of the button; (b) allocating characters or controls to lattice elements on each button on the keypad; and (c) sensing the selection of first and second buttons and inputting a selected character or a selected control, wherein it is recognized that the first button corresponding to the lattice element containing the character or control to be input is pressed, and it is recognized that a

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button designating a lattice element corresponding to the character or control to be input is pressed, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 2**, Burrell discloses everything claimed as applied above (see claim 1), in addition Burrell discloses wherein each of the buttons on the keypad is provided with a lattice corresponding to some of the buttons of the keypad, the lattice including a base lattice element, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 3**, Burrell discloses everything claimed as applied above (see claim 1), in addition Burrell discloses wherein in the step (b) characters having higher use frequency are allocated to lattice elements for which it is more convenient to combine the first button and the second button, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 4**, Burrell discloses everything claimed as applied above (see claim 2), in addition Burrell discloses wherein for English, about 3 characters are sequentially assigned to each of (1)-(9) buttons and arranged in a 3x1 lattice on the button, and the characters are input according to horizontal straight combination, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 5**, Burrell discloses everything claimed as applied above (see claim 4), in addition Burrell discloses wherein the 3 characters sequentially assigned to each button are arranged in the lattice such that a character having higher use frequency is allocated to a lattice element for which it is more convenience to combine

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the buttons, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 14**, Burrell discloses a method of inputting alphabet characters in a keypad, comprising the steps of: (a) forming a lattice on the surface of each button on the keypad such that the lattice elements correspond to the buttons on the keypad, and defining a lattice elements on each button, which corresponds to the position of the button on the keypad, as a base lattice element of the button; (b) allocating characters or controls to lattice elements on each button on the keypad, and (c) sensing one or more selections of a first button and inputting a selected character or a selected control, wherein priority is given to characters and controls allocated to lattice elements on the first button in a predetermined standard on the basis of the base lattice element, and the selected character or the selected control is a character or a control corresponding to the number of repeated selections, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 15**, Burrell discloses everything claimed as applied above (see claim 14), in addition Burrell discloses wherein each of the buttons on the keypad is divided with a lattice corresponding to some of the buttons of the keypad, the lattice including a base lattice element, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 18**, Burrell discloses a method of inputting alphabet characters on a keypad, comprising the steps of: (a) classifying a plurality of alphabet characters to be input into a predetermine number of groups, assigning the groups of characters to

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character input buttons, respectively, determining representative characters (basic characters) in the respective groups, inscribing the representative characters on the surfaces of the character input buttons, and determining the order of succeeding characters (affixed characters) in each group; (b) allocating one or more controls to control buttons; and (c) sensing the selection of a character input button and the repeated selection of a control button to input a selected character, wherein the selected character is selected from a group of characters assigned to the selected character input button depending on the number of repeated selection of the control button, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 19**, Burrell discloses everything claimed as applied above (see claim 18), in addition Burrell discloses wherein the wherein the repeated selection of the control button is performed before the selection of the character input button, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 20**, Burrell discloses everything claimed as applied above (see claim 18), in addition Burrell discloses wherein the repeated selection of the control button is performed after the selection of the character input button, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Regarding **claim 33**, Burrell discloses a method of selecting an alphabet character on a standard English keypad on which base lattice elements are not inscribed, using horizontal straight combination according to a pad-whole selection

method, as disclosed at column 8, line 36 through column 9, line 16 and exhibited in figures 5 and 6.

Allowable Subject Matter

3. ***Claims 31 and 32*** are allowed.
4. ***Claims 6-13, 16, 17, and 21-30*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F Harold whose telephone number is 703-306-5836. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH
September 30, 2004

Jefferey F Harold
Examiner
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